CATGAAGGTTCCTCCTGTCCTGCTTCTCTTTCTTCTGTCCTCAGTGCGAGCTACTGAGCAACCGCAGGTCGTCACTG
AGCATCCCAGCATGGAGGCAGCCCTGACCGGGCCCAACGCCTCCTCGCACTTCTGGGCCAACTACACTTTCTCTGAC
TGGCAGAACTTCGTGGGCAGGAGACGTTATGGGGCCGAGTCCCAGAACCCCACGGTGAAAGCACTGCTCATCGTGGC
CTACTCATTCACCATCGTCTTCTCGCTCTTCGGTAATGTCCTGGTCTGTCATGTCATCTTCAAGAACCAGCGCATGC
ACTCGGCCACCAGCCTCTTCATTGTCAACCTGGCAGTGGCGGACATCATGATCACATTGCTCAACACGCCCTTCACT
TTGGTCCGCTTTGTGAACAGCACATGGGTGTTTGGGAAGGGCATGTGTCATGTCAGTCGCTTTGCTCAGTACTGTTC
TCTACATGTCTCAGCACTGACTCTGACAGCTATCGCAGTGGACCGCCACCAGGTCATCATGCATCCACTGAAGCCTC
GGATCTCCATCACCAAGGGTGTCATATATATTGCTGTCATCTGGGTCATGGCTACCTTCTTCTCTCTGCCACATGCC
ATCTGCCAGAAACTGTTTACCTTCAAGTACAGTGAGGACATTGTGCGCTCCCTCTGCCTGCCGGACTTCCCGGAGCC
AGCTGACCTCTTCTGGAAGTATCTGGACCTGGCCACCTTCATCCTGCTCTACCTACTTCCACTCTTCATTATCTCAG
TGGCCTATGCTCGTGTGGCCAAGAAGCTGTGGCTCTGTAACACCATTGGCGACGTGACCACAGAGCAGTACCTCGCC
CTGCGACGCAAGAAGAAGACCACCGTGAAGATGCTGGTGCTTGTGGTAGTCCTCTTTGCCCTCTGCTGGTTCCCTCT
CAACTGCTATGTCCTCCTCTTGTCCAGCAAGGCCATCCACACCAACAATGCCCTCTACTTTGCCTTCCACTGGTTTG
CCATGAGCAGTACTTGTTATAACCCCTTCATCTACTGCTGGCTCAATGAGAACTTTAGGGTTGAGCTTAAGGCATTG
CTGAGCATGTGCCAAAGGCCACCCAAGCCGCAGGAAGACAGGCTACCCTCCCCAGTTCCTTCCTTCAGGGTGGCATG
GACAGAGAAGAGCCATGGTCGGAGGGCTCCACTACCTAATCACCACTTGCCCTCTTCCCAGATCCAGTCTGGGAAGA
CAGATCTGTCATCTGTGGAACCCGTTGTGGCCATGAGTTAGGGAAAGCTGGAAGTTGGTGGGGGAGGGTTCTTTCCT
CTCACAATTGACCAGACACTAACAGAGTTGGAAAGTAACACAGAAGCAGTGAGATGCTTGGGTTCCTAGGAACCTGT
CCAGCCCCATCTGATTTGCAAACTTTCTAGAAGATGCCATGAGGTGGTGTGTGTAGATCTTTGAGCAAGAGCTCTGG
AAACCACCTCAGCTTCAACAGAGGCTGGTCCAGTCAACCACCTCCAATTGTGTAGCATCTGCCACCTTGCCCTTCCT
ACTGCTGAGCAACCACAGGGGGACTTGAGCCATACTATTGGTGGGCCTGCCCCACATGCTCAGAAAAGAACAGGCAC
AAAGGCTTTCTGAAGTCATTGGAACAGGAATAATCACACAGCTTCAGTGACCTTGGCTCTATCCATGACCAGACAGG
ACCCATTTTGGCTTCTTAAAAACAAAGAGAAATTAGTATTGCCACTTTGAAAAGTTCAGAAAAGTAAAGAAATGAGT
TCAGCCCTCAATTTGTAAAAAAAGGAAAAAAGAAAAAAAAAAGAAAAAGAAAGAAAAAAGCCTGTTAATATGCTGTA
AATTTATCTGTAGCTTTGCCTTCTGTGTGTGTACATTTGTACTTTTAAAATCCTGAACTACACGTGTCCATGTAGAT
TGTAATAATTAGCAAGAAACTGGAATATATCAGAGTATTATTGAATTC (SEQ ID NO:1)

MKVPPVLLLFLLSSVRATEQPQVVTEHPSMEAALTGPNASSHFWANYTFSDWQNFVGRRRYGAESQNPTVKALLIVA
YSFTIVFSLFGNVLVCHVIFKNQRMHSATSLFIVNLAVADIMITLLNTPFTLVRFVNSTWVFGKGMCHVSRFAQYCS
LHVSALTLTAIAVDRHQVIMHPLKPRISITKGVIYIAVIWVMATFFSLPHAICQKLFTFKYSEDIVRSLCLPDFPEP
ADLFWKYLDLATFILLYLLPLFIISVAYARVAKKLWLCNTIGDVTTEQYLALRRKKKTTVKMLVLVVVLFALCWFPL
NCYVLLLSSKAIHTNNALYFAFHWFAMSSTCYNPFIYCWLNENFRVELKALLSMCQRPPKPQEDRLPSPVPSFRVAW
TEKSHGRRAPLPNHHLPSSQIQSGKTDLSSVEPVVAMS (SEQ ID NO:2)

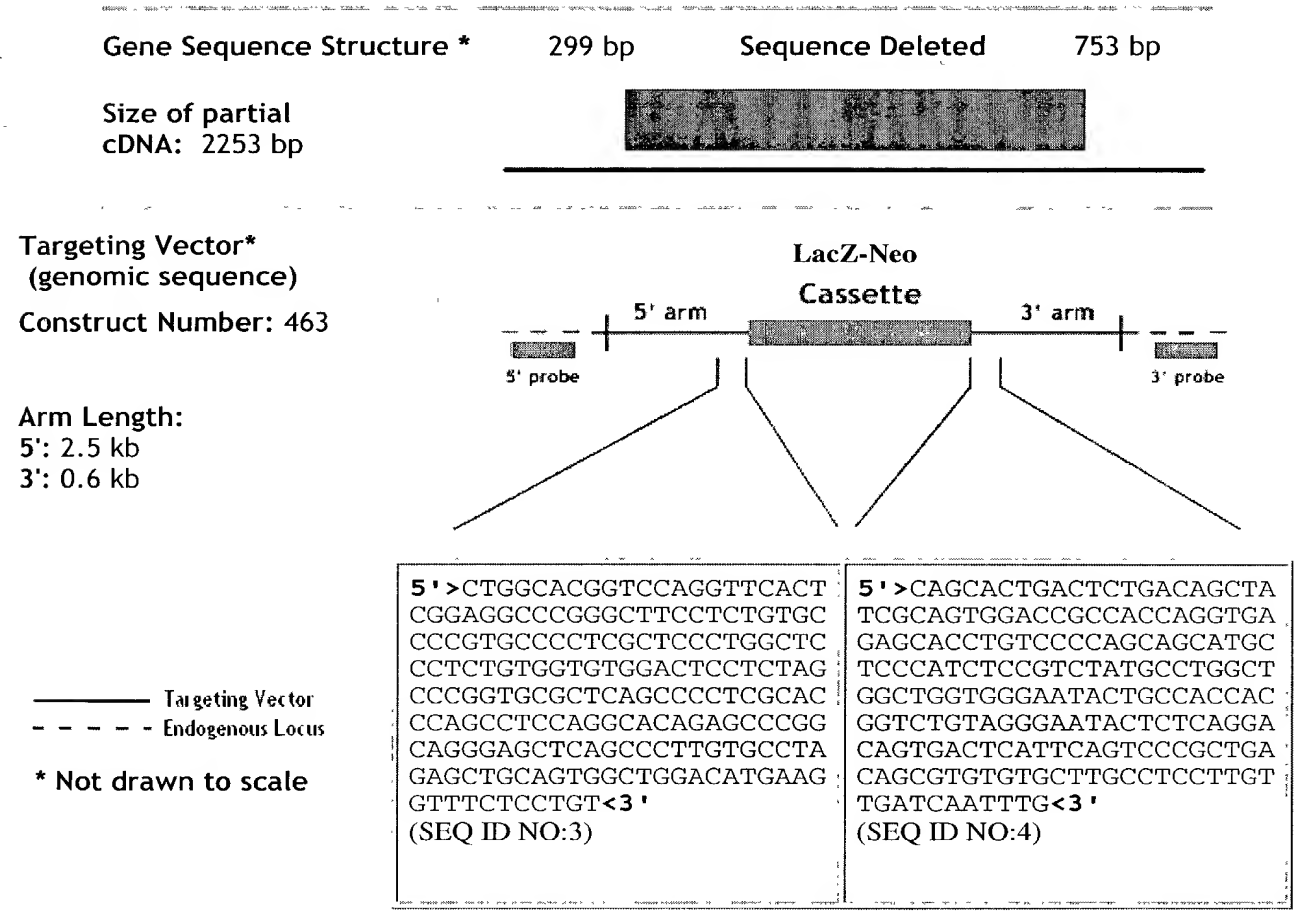
FIGURE 1

Underlined = deleted in targeting construct

Bold = sequence flanking Neo insert in targeting construct

GGGGTGGCAGTCGGCACCATCAGGCTCCCTTGGCGTTTCGGAGTTTTCTCTGTGGTCCCG
ACTCTCCGGAGGATCTCGGTTGTCTCCCAAGTCGGAACCTGGCACGGTCCAGGTTCACTC
GGAGGTCCGGGCTTCCTCTGTGCCCCGTGCCCCTCGCTCCCAGGCTCCCTCTGTGGTGTG
GACTCCTCTAGCCCGGTGCGCTCAGCCCCTCGCACCCAGCCTCCAGGCACAGAGCCCGGC
AGGGAGCTCAGCCCTTGTGCCTAGAGCTGCAGTGGCTGGACATGAAGGTTCCTCCTGTCC
TGCTTCTCTTTCTTCTGTCCTCAGTGCGAGCTACTGAGCAACCGCAGGTCGTCACTGAGC
ATCCCAGCATGGAGGCAGCCCTGACCGGGCCCAACGCCTCCTCGCACTTCTGGGCCAACT
ACACTTTCTCTGACTGGCAGAACTTCGTGGGCAGGAGACGTTATGGGGCCGAGTCCCAGA
ACCCCACGGTGAAAGCACTGCTCATCGTGGCCTACTCATTCACCATCGTCTTCTCGCTCT
TCGGTAATGTCCTGGTCTGTCATGTCATCTTCAAGAACCAGCGCATGCACTCGGCCACCA
GCCTCTTCATTGTCAACCTGGCAGTGGCGGACATCATGATCACATTGCTCAACACGCCCT
TCACTTTGGTCCGCTTTGTGAACAGCACATGGGTGTTTGGGAAGGGCATGTGTCATGTCA
GTCGCTTTGCTCAGTACTGTTCTCTACATGTCT**CAGCACTGACTCTGACAGCTATCGCAG**
TGGACCGCCACCAGGTCATCATGCATCCACTGAAGCCTCGGATCTCCATCACCAAGGGTG
TCATATATATTGCTGTCATCTGGGTCATGGCTACCTTCTTCTCTCTGCCACATGCCATCT
GCCAGAAACTGTTTACCTTCAAGTACAGTGAGGACATTGTGCGCTCCCTCTGCCTGCCGG
ACTTCCCGGAGCCAGCTGACCTCTTCTGGAAGTATCTGGACCTGGCCACCTTCATCCTGC
TCTACCTACTTCCACTCTTCATTATCTCAGTGGCCTATGCTCGTGTGGCCAAGAAGCTGT
GGCTCTGTAACACCATTGGCGACGTGACCACAGAGCAGTACCTCGCCCTGCGACGCAAGA
AGAAGACCACCGTGAAGATGCTGGTGCTTGTGGTAGTCCTCTTTGCCCTCTGCTGGTTCC
CTCTCAACTGCTATGTCCTCCTCTTGTCCAGCAAGGCCATCCACACCAACAATGCCCTCT
ACTTTGCCTTCCACTGGTTTGCCATGAGCAGTACTTGTTATAACCCCTTCATCTACTGCT
GGCTCAATGAGAACTTTAGGGTTGAGCTTAAGGCATTGCTGAGCATGTGCCAAAGGCCAC
CCAAGCCGCAGGAAGACAGGCTACCCTCCCCAGTTCCTTCCTTCAGGGTGGCATGGACAG
AGAAGAGCCATGGTCGGAGGGCTCCACTACCTAATCACCACTTGCCCTCTTCCCAGATCC
AGTCTGGGAAGACAGATCTGTCATCTGTGGAACCCGTTGTGGCCATGAGTTAGGGAAAGC
TGGAAGTTGGTGGGGGAGGGTTCTTTCCTCTCACAATTGACCAGACACTAACAGAGTTGG
AAAGTAACACAGAAGCAGTGAGATGCTTGGGTTCCTAGGAACCTGTCCAGCCCCATCTGA
TTTGCAAACTTTCTAGAAGATGCCATGAGGTGGTGTGTGTAGATCTTTGAGCAAGAGCTC
TGGAAACCACCTCAGCTTCAACAGAGGCTGGTCCAGTCAACCACCTCCAATTGTGTAGCA
TCTGCCACCTTGCCCTTCCTACTGCTGAGCAACCACAGGGGGACTTGAGCCATACTATTG
GTGGGCCTGCCCCACATGCTCAGAAAAGAACAGGCACAAAGGCTTTCTGAAGTCATTGGA
ACAGGAATAATCACACAGCTTCAGTGACCTTGGCTCTATCCATGACCAGACAGGACCCAT
TTTGGCTTCTTAAAAACAAAGAGAAATTAGTATTGCCACTTTGAAAAGTTCAGAAAAGTA
AAGAAATGAGTTCAGCCCTCAATTTGTAAAAAAAGGAAAAAAGAAAAAAAAAAGAAAAAG
AAAGAAAAAAGCCTGTTAATATGCTGTAAATTTATCTGTAGCTTTGCCTTCTGTGTGTGT
ACATTTGTACTTTTAAAATCCTGAACTACACGTGTCCATGTAGATTGTAATAATTAGCAA
GAAACTGGAATATATCAGAGTATTATTGAATTC

FIGURE 2A



5'>CTGGCACGGTCCAGGTTCACT CGGAGGCCCGGGCTTCCTCTGTGC CCCGTGCCCCTCGCTCCCTGGCTC CCTCTGTGGTGTGGACTCCTCTAG CCCGGTGCGCTCAGCCCCTCGCAC CCAGCCTCCAGGCACAGAGCCCGG CAGGGAGCTCAGCCCTTGTGCCTA GAGCTGCAGTGGCTGGACATGAAG GTTTCTCCTGT<3' (SEQ ID NO:3)	5'>CAGCACTGACTCTGACAGCTA TCGCAGTGGACCGCCACCAGGTGA GAGCACCTGTCCCCAGCAGCATGC TCCCATCTCCGTCTATGCCTGGCT GGCTGGTGGGAATACTGCCACCAC GGTCTGTAGGGAATACTCTCAGGA CAGTGACTCATTCAGTCCCGCTGA CAGCGTGTGTGCTTGCCTCCTTGT TGATCAATTTG<3' (SEQ ID NO:4)

FIGURE 2B